

# High Power Amplifier SA75D



## Features

- High current, up to 10 Amps peak
- Frequency from DC up to 1 kHz
- Low distortion
- Power factor correction on AC line
- Large actuators and high frequency driving capabilities

## Purpose

The SA75D is a new high power amplifier dedicated to supply piezo-electric actuators. Using high frequency PWM with a specific topology for piezo-electric loads, the SA75D offers large power and a very low ripple. These special features make the SA75D perfect for dynamic and precise motion applications. The SA75D is developed with the G2ELAB in the frame of the **Avibus** project. Other applications are found in machine tools (in other vibration assisted process or anti-vibration), in aerospace (in helicopter piezo flap mechanisms), etc...

## Description

SA75D is a class D amplifier with a switching frequency superior to 150 kHz. Its efficiency allows reaching 10 amperes peak with total harmonic distortion close to linear amplifiers performances. The SA75D amplifier is dedicated to be installed in a standalone 84F4U rack. The SA75D compactness offers the possibility to have several amplifiers in addition with signal conditioners and numerical controllers in one 84F4U rack.



Fig: SA75D in Rack with sensor conditioner

Parameter	Value
Supply voltage	230V 50Hz or 115V/60Hz
Output voltage	-20V to 150V
Output current	15A nominal 20A peak
Frequency range	From DC up to 1kHz
PWM frequency	> 150 kHz
THD	<0.1% full power
Input voltage range	-1V to 7.5V
Input impedance	10 kOhms
Input connector	BNC
Casing	Rack 84F4U
Number of channel per rack	Up to 3 (depending on the other equipment)

For more information, please contact:

CEDRAT TECHNOLOGIES  
15 Chemin de Malacher - Inovallée  
38246 Meylan Cedex - France  
[actuator@cedrat.com](mailto:actuator@cedrat.com)  
Phone: +33 (0)4 76 90 50 45 - Fax: +33 (0)4 56 38 08 30